REMARKS

The Office Action dated August 1, 2005 has been received and carefully noted. The above amendments to the claims and the following remarks are submitted as a full and complete response to the Office Action.

Claim 9 is amended to correct informalities. New claims 14-16 are added. No new matter is added. Claims 2-7, 9 and 11-16 are respectfully submitted for consideration.

The Office Action objected to claim 9 because of informalities. Applicants submit that claim 9 is amended to recite "a respective" in accordance with the Office Action.

The Office Action objected to claims 9 and 11-13. Specifically, the Office Action asserted that the claims mention a radio network controller and a respective radio transceiver device, which are part of the radio access network and that it is not clear what is the relationship between the radio network controller and the respective radio transceiver device.

Applicants submit that the relationship between the radio network controller and the transceiver is clearly described in the specification and in claims 9 and 11-13. Specifically, the Office Action correctly assumes that the "respective radio transceiver is part of the base station" as shown in Figure 1 and described in the specification at least on page 1 lines 22-25. However, the radio network controller provides control for the base stations, as clearly shown in Figure 1 and clearly described at least on page 1, lines 32-34, of the specification. Thus, the relationship between the radio network controller and the transceiver is clearly defined in the specification and claims 9 and 11-13.

Applicants respectfully request withdrawal of the objections to claims 9 and 11-13.

The Office Action rejected claims 9, 2-7 and 11-13 under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,654,377 to Pasternak (Pasternak). This rejection is respectfully traversed.

Claim 9, from which claims 2-7 depend, recites a method for controlling transmission resources of a radio access network adapted to transmit data packets in real time traffic and in non-real time traffic wherein the transmission resources are controlled on an interface between a radio network controller and at least one radio transceiver device of said radio access network being controlled by said radio network controller,. The method includes obtaining information related to transmission resources required for handling real time traffic in a radio network controller. The method also includes reserving transmission resources for handling non-real time traffic dynamically based on a knowledge of overall available transmission resources of a respective radio transceiver device of the radio access network and the information related to the transmission resources required for handling real time traffic by the respective radio transceiver. The respectively reserved transmission resources are distinguished on the basis of ATM virtual path identifiers and virtual channel identifiers. The reserving step preselects the transmission resources for the respective radio transceiver device. The method also includes transmitting prevailing traffic based on an identity of the traffic to be handled by

selectively addressing the ATM virtual path identifiers and virtual channel identifiers for the real time/non-real time traffic to be handled.

Claim 11 recites a radio access network control device configured to obtain information related to transmission resources required for handling real time traffic in a radio network controller. The radio access network control device also is configured to reserve transmission resources for handling non-real time traffic dynamically based on a knowledge of overall available transmission resources of a respective radio transceiver device of the radio access network and the information related to the transmission resources required for handling real time traffic by the respective radio transceiver. The respectively reserved transmission resources are distinguished on the basis of ATM virtual path identifiers and virtual channel identifiers and reserved by preselecting transmission resources for the respective radio transceiver device. The radio access network control device also is configured to transmit prevailing traffic based on an identity of the traffic to be handled by selectively addressing the ATM virtual path identifiers and virtual channel identifiers for the real time/non-real time traffic to be handled.

Claim 12 recites a radio network control device. The radio network control device includes obtaining means for obtaining information related to transmission resources required for handling real time traffic in a radio network controller. The radio network control device also includes reserving means for reserving transmission resources for handling non-real time traffic dynamically based on a knowledge of overall available

transmission resources of a respective radio transceiver device of the radio access network and the information related to the transmission resources required for handling real time traffic by the respective radio transceiver. The respectively reserved transmission resources are distinguished on the basis of ATM virtual path identifiers and virtual channel identifiers. The radio network control device also includes transmitting means for transmitting resources for the respective radio transceiver device and to transmit prevailing traffic based on an identity of the traffic to be handled by selectively addressing the ATM virtual path identifiers and virtual channel identifiers for the real time/non-real time traffic to be handled.

Claim 13 recites a radio transceiver device. The radio transceiver device is configured to receive, from a radio access network control device, information relating to reserved transmission resources for handling non-real time traffic and for handling real time traffic. The respectively reserved transmission resources are distinguished on the basis of ATM virtual path identifiers and virtual channel identifiers. The radio transceiver device also is configured to use the reserved transmission resources for transmission, based on the ATM virtual path identifiers and virtual channel identifiers, by allocating respective traffic to corresponding channel elements distinguished on the basis of ATM virtual path identifiers and virtual channel identifiers. The radio transceiver device also is configured to reserve by preselecting transmission resources for the respective radio transceiver device. The radio transceiver device also is configured to transmit prevailing traffic based on an identity of the traffic to be handled by selectively

addressing the ATM virtual path identifiers and virtual channel identifiers for the real time/non-real time traffic to be handled.

As discussed in the specification, examples of the present invention enable the removal of a need for heavy channel activation signaling on slow control channels before each channel allocation procedure. For example, the base station and the radio network controller (RNC) know about the resources that may be used for non-real time traffic such that resources may not need to be reserved on a per bearer basis. Thus, virtual channels also may not have to be reserved on a per bearer basis. Applicants respectfully submit that the cited references fail to disclose or suggest the elements of any of the presently pending claims. Therefore, the cited references fail to provide the critical and unobvious advantages discussed above.

Pasternak is directed to a wireless ATM network with high quality of service scheduling. As described in Pasternak, requests and grants are specified per virtual circuits (VC) scheduler. If the service of a particular VC is constant bit rate or requires real-time performance, a BS scheduler (virtual framer) is invoked to provide periodical request less grants to the VC.

Applicants submit that Pasternak fails to disclose or suggest at least the feature of obtaining information related to transmission resources required for handling real time traffic in a radio network controller, as recited in claim 9, and similarly recited in claims 11-13.

Applicants submit that a base station is not a radio network controller, as alleged in the Office Action, nor are the two features analogous. In particular, the base station disclosed in Pasternak contains several base sector controllers, and each base sector controller has multiple ports, wherein each port serves one base radio unit. Further, the base station controllers control the operation of the sector and all subscriber terminals that are tuned to the carrier frequency of the attached base radio unit and perform all ATM traffic control and the scheduling of transmission in the sector (see column 8 lines 16 – 27 and Figure 2). Therefore, the base station and associated base station controller merely control traffic to and from subscriber terminals. The traffic (traffic on a wireless interface) to and from subscriber terminals in organized in the VCs. Traffic is scheduled per virtual circuit and thus per subscriber terminal handled by a base radio unit serving a subscriber terminal.

However, as discussed above the present invention concerns traffic between a base transceiver station (BTS) and a radio network controller that controls a plurality of base stations. Applicants submit that this feature is not mentioned, disclosed or suggested in Pasternak.

Applicants further submit that Pasternak fails to disclose or suggest at least the feature of reserving transmission resources for handling non-real time traffic dynamically based on a knowledge of overall available transmission resources of a respective radio transceiver device of the radio access network and the information related to the

transmission resources required for handling real time traffic by the respective radio transceiver, as recited in claim 9 and similarly recited in claims 11-13.

Instead, the method disclosed in Pasternak merely schedules traffic types within the framework of existing or previously allocated resources. Resource re-allocation is not performed in Pasternak. Further, Pasternak states that "if multiple VCs request bandwidth in excess of their traffic contract, the VCs will get to requested bandwidth but the NCT values will interleave grants for the VCs with similar traffic parameters and defer grants for VCs with lower speed. Thus, interleaving/deferring of granting a transmission refers to scheduling which defines who is allowed to transmit when within existing resources. However, no resource re-allocation is performed. Similarly, with regard to the virtual framer, Pasternak teaches that in one embodiment, "RT-VBR traffic is served by the virtual framer using periodic grants, and if the subscriber VC has no traffic, the subscriber terminal transmits idle cells." See Pasternak at column 3 lines 33-36 and column 4 lines 39-45. Hence, in Pasternak the resources for real-time traffic are allocated once, and if there is not real-time traffic, these resources are wasted by transmitting idle cells.

In contrast, in the present invention the transmission resources for handling non-real time traffic would be dynamically reserved and adapted by increasing the resources by the amount of transmission resource of unused real-time traffic resources.

Further, Applicants submit that because claims 2-7 depend from claim 9, these claims are allowable at least for the same reasons as claim 9.

Thus, as discussed above Pasternak fails to disclose or suggest all of the features recited in any of the pending claims. Accordingly, withdrawal of the rejection of claims 2-7, 9 and 11-13 is respectfully requested.

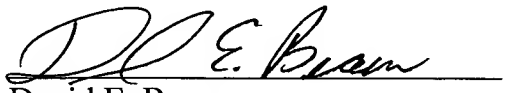
Applicants submit that new claims 14-16 recite features that are neither disclosed or suggested by the cited references. In addition, because these claims depend from claims 9, 11-13 respectively, they are allowable at least for the same reasons as claims 9 and 11-13.

Applicants respectfully request allowance of each of claims 2-7, 9 and 11-16 and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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